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ITC Tank Fire

Deer Park, TX

Analytical Air Sampling Adjustment Plan

Prepared on Behalf of:

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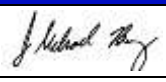
Prepared by:	Mike Berg, Ph.D., CIH, CSP		4/6/2019
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1. Introduction

This Analytical Air Sampling Adjustment Plan is being prepared to identify those criteria to apply to the collected data to demonstrate that a reduction in ambient analytical air sampling efforts is appropriate for the Second 80's Tank Fire Response. To date, the Unified Command-approved Air Sampling and Analysis Plan has been utilized for the following functions:

- Monitor the air within the residential areas (e.g., community) around the ITC facility;
- Monitor the air within the industrial areas and within specific facilities surrounding the incident site;
- Monitoring the air within each operational division (A-E) to include both land- and water-based operations;
- Sample the air within the breathing zone of response-associated workers; and
- Sample the air at stationary sampling locations using appropriate USEPA methodology.

Ambient air monitoring for this response was initiated on March 17, 2019 shortly after the Second 80's Tank Fire incident. Analytical air sampling was initiated on March 18, 2019 at four locations. A significant increase in the number of analytical sampling stations occurred on March 21, 2019. A map identifying the locations of all of the analytical air sampling stations to-date on this response is provided in **Appendix A**[1]. The following section identifies the rationale and provides the criteria recommended for a reduction in analytical air sampling efforts.

2. Ambient Analytical Air Sampling

At the current time, 34 ambient analytical air sampling stations remain in operation. At each of these sampling stations, an air sample is being collected using a Minican™ or Summa Canister over a 24-hour time period. These samples are being sent to a 3rd-party analytical laboratory for analysis of volatile organic compounds (VOCs) using USEPA Method TO-15.

At the request of the Operations Section, this work plan outlines those criteria to be evaluated to determine that a reduction or elimination of current analytical air sampling efforts would be appropriate. The criteria proposed to support this reduction are:

- The sampling station has been in operation for at least fourteen days;
- Analytical results for the last 14 days' worth of data has been reported by the laboratory for that station;
- Review of the analytical data indicates that last 7 days' worth of data for the station below the TCEQ 24-hr Air Monitoring Comparison Values (AMCV) for benzene (0.100 ppm) and 1,3-butadiene (0.430 ppm).
- Review of the analytical data indicates that the last 14 days' worth of data, when averaged, are below the ATSDR Inhalational Minimal Risk Levels (MRL) for benzene, toluene, ethylbenzene, and xylene.

As defined by the ATSDR, the MRLs are "*intended to serve as a screening tool to help public professionals decide where to look more closely. They may also be used as a mechanism to identify those hazardous waste sites that are not*

[1] Note that analytical sampling station MC035 – MC038 were initiated in response to an off-site event not associated with the Second 80's Tank Fire on March 26, 2019. These stations were demobilized on March 27, 2019.

expected to cause adverse health effects". Due to the potential duration of this event, it is recommended that, when available, the intermediate MRLs are utilized as these values encompass a potential exposure duration of 15 to 365 days. Intermediate exposure duration values are available for benzene (0.006 ppm), ethylbenzene (2 ppm), and xylene (0.6 ppm). In the absence of an intermediate value for toluene, a chronic inhalation MRL (1 ppm) will be utilized to screen the results.

For the purposes of this plan, a sampling station may be suitable for demobilization if the above criteria are met. Notwithstanding, CTEH® will continue real-time air monitoring around the worksite and within residential areas and maintain sufficient resources on-site to re-establish analytical air sampling stations at these locations rapidly should conditions change.